

## NORTH PACIFIC OCEAN

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The average pressure during May, 1927, was close to normal over a great part of the North Pacific Ocean. A long, shallow trough of low pressure—the Aleutian Low—covered the western part of the Gulf of Alaska and the southeastern part of Bering Sea, and extended southwestward along the Aleutian Islands, with the minimum reading, 29.85 inches, at Kodiak. An anticyclone, almost unbroken by cyclonic influences, except for slight intrusions from the northward, covered the eastern and central part of the ocean from the American coast to beyond the one hundred and eightieth meridian. On the China coast cyclonic conditions normal to the season prevailed, the continental anticyclone of the cooler season having by this time entirely disappeared.

Pressure data for certain American island and coast stations in west longitudes are found in the following table:

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean, May, 1927

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Dutch Harbor <sup>1</sup> .....	29.87	-0.05	30.58	24th....	29.20	9th.
St. Paul <sup>1</sup> .....	29.94	+0.08	30.48	24th....	29.38	8th.
Kodiak <sup>1</sup> .....	29.85	-0.02	30.36	5th....	29.18	10th.
Midway Island <sup>1</sup> .....	30.16	+0.07	30.34	6th <sup>1</sup> ....	29.92	1st.
Honolulu <sup>2</sup> .....	30.06	+0.01	30.14	14th....	29.93	25th.
Juneau <sup>2</sup> .....	30.01	+0.02	30.40	13th....	29.57	11th.
Tatoosh Island <sup>2,3</sup> .....	30.07	+0.03	30.44	13th....	29.55	1st.
San Francisco <sup>1,2</sup> .....	30.03	+0.05	30.23	11th....	29.72	25th.
San Diego <sup>1,2</sup> .....	29.95	+0.02	30.08	11th....	29.81	5th.

<sup>1</sup> P. m. observations only.

<sup>2</sup> A. m. and p. m. observations.

<sup>3</sup> Corrected to 24-hour mean.

<sup>4</sup> For 30 days.

<sup>5</sup> On other date.

At Honolulu easterly winds prevailed. The average hourly velocity was 10.4 miles, and the maximum velocity was 36 miles from the east on the 15th.

Generally speaking, May was a quiet month over most of the North Pacific. High winds, that is, gales exceeding 7 in force, were rare south of the fortieth parallel, vessels within this great region reporting fresh to strong gales only, and these limited to the coast regions off the Peninsula of California on the 21st and 22d, and east of Honshu on the 16th and 24th. Gales were more frequent to the northward of the fortieth parallel, yet nowhere exceeded 8 or 9 in force, except on the 3d, when a whole gale was experienced off Vancouver Island by the Japanese steamer *Hayo Maru* previous to the passage of a small cyclone into the coast of British Columbia. A further small cyclone in this vicinity on the 17th caused a 56-mile westerly wind at Tatoosh Island.

Fresh to strong gales occurred early in the month between 42° and 50° north latitude, 130° and 155° west longitude. During the second decade gales were experienced on various days along the upper steamship routes west of 160° west longitude, but were mostly concentrated from the 12th to the 17th over a region roughly bounded by latitudes 45° and 50° N., longitudes 155° and 175° E., south and southeast of Kamchatka. The last week in May witnessed gales in upper mid-ocean south of the eastern Aleutians, and over a comparatively small area east of Honshu and the Kuril Islands.

Fog was more frequent in May than in April, except perhaps along the American coast, where there was little change from that of the previous month. The 12th to the 17th were the most general days with it between the central Californian coast and Cape San Lucas. Away from the coast, along the upper half of the route between Seattle and Honolulu, dense wet fogs were encountered from the 12th to the 14th, and from the 22d to the 25th. Along the northern steamship routes there were a number of foggy days in west longitudes; but they were more frequent from the western Aleutians to the coast of Japan, over a considerable part of which area fog occurred on 25 to 40 per cent of the days, which is above the average there for May.